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## **CLAIMS**

We I claim:

1. A process for the production of a compound or a salt thereof of the formula I

$$X \leftarrow N$$
 $Y_2$ 
 $Y_2$ 
 $Y_2$ 

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in which:

X is a hydrogen or C<sub>1-4</sub> alkyl group and Y<sub>1</sub> and Y<sub>2</sub> are either hydrogen or C<sub>1-4</sub> alkyl and R is methyl or C<sub>2-4</sub> alkyl group,

which comprises reacting a compound of the formula III

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where X,  $Y_1$ ,  $Y_2$ , R are defined as above, with phosphorus tribromide in a non-reactive organic solvent to produce an intermediate, and hydrolysis of the intermediate.

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- 5 2. The process of claim 1 in which the organic solvent is a chlorinated hydrocarbon, ether or methyl isobutyl ketone.
  - 3. The process of claim 1 in which X is methyl,  $Y_1$  is hydrogen and  $Y_2$  is methyl and R is methyl and the product is 6-methyl-N,N-dimethyl-2-(4-methylphenyl)imidazo[1,2-a]pyridine-3-acetamide.
- 4. The process for the formation of compound III which comprises reacting a compound of formula;

where R is methyl or C<sub>2-4</sub> alkyl, with an imidazo[1,2-a]pyridine of the formula;

$$X \longrightarrow N \longrightarrow Y_1$$

where X and Y<sub>1</sub> and Y<sub>2</sub> are either hydrogen or C<sub>1-4</sub> alkyl, in an organic solvent.

- A process of claim 4 where X, Y<sub>1</sub> is methyl, Y<sub>2</sub> is hydrogen and R is methyl and the product is 6-methyl- N,N-dimethyl-2-(4-methylphenyl)-α-hydroxyimidazo[1,2-a]pyridine-3-acetamide.
  - 6. A process of claim 4 where the organic solvent is capable of removing water as an azetrope.
  - 7. A process of claim 4 where the pH is between 4.5 and 9.5.
- 8. A process of claim 4 where the organic solvent is selected from the group consisting of an alkyl hydrocarbon, aromatic hydrocarbon, chlorinated hydrocarbon, ketone, ester and ether.